

## IN THE UNITED STATES PATENTS AND TRADEMARKS OFFICE

Applicants:

**RONALD VERMEER** 

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For:

**CONCENTRATED SUSPENSIONS** 

**Art Unit:** 

4173

**Examiner:** 

FISHER, ABIGAIL L.

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

# **DECLARATION**

- I, <u>Peter Baur</u>, of Schulstraße 5, 86938 Schondorf, Germany, a citizen of Germany, hereby declare:
- that I have studied biology (with biochemistry, biophysics) at the Technical University of Munich, Germany, and that I have obtained a Biologist (Diploma) degree in 1991;
- that I received the degree of Dr. rer. nat. at the Technical University of Munich, Germany, in 1993;
- 3. that I qualified as a University Lecturer (Habilitation) in Horticulture (Ecophysiology and Fruit Science at Leibniz University of Hannover in 1998 and that I am apl. Professor at University of Hannover since 2003;
- 4. that I entered the employ of Bayer Aktiengesellschaft, Leverkusen, in 1999, that after the spin-off from Bayer CropScience AG I am now employee of this company and that I am the Group Leader Bioavailability Optimization in the Formulation Technology Department in Frankfurt since 2003:
- 5. that the following tests have been carried out under my supervision and control.

#### Example

Penetration of Tebuconazole was measured with enzymatically isolated leaf cuticles from field trees (variety Golden Delicious, Commercial Orchard "Obsthof am Berg", Kriftel, 2006). The cuticles were fixed on stainless steel transport chambers and spray liquids with the test formulations were applied by means of a micropipette (10 µl per cuticle). The Tebuconazole formulation was a high loaded SC570 devoid of the test compounds Atlox 4894 (Croda) and Genapol C-100 (Clariant). A stock solution of 0.5 g/l Tebuconazole was prepared from the SC570 with radiolabelled active and at a radioactive concentration of 10000 dpm per 10 µl. This spray solution was prepared in (common) tap water and was tested alone or with Atlox 4894 at a spray concentration characteristic and consistent with the use in formulations (0.025 g/l) or 20-fold higher (0.5 g/l), or with Genapol C-100 at the selected adjuvant concentration of 0.5 g/l. After evaporation of spray water in the lab the transport chambers were kept under constant conditions 20°C and 60 % relative humidity. Samples have been taken after 3, 12, 24, 36, and 48 hours after application. There were at least 10 repetitions for each treatment. Results of the mean values are shown in the below table.

### **Formulations Tested**

A: Folicur SC570 containing 570 g/L Tebuconazole

B: Folicur SC570 + 0.025 g/L Atlox 4894

C: Folicur SC570 + 0.5 g/L Atlox 4894

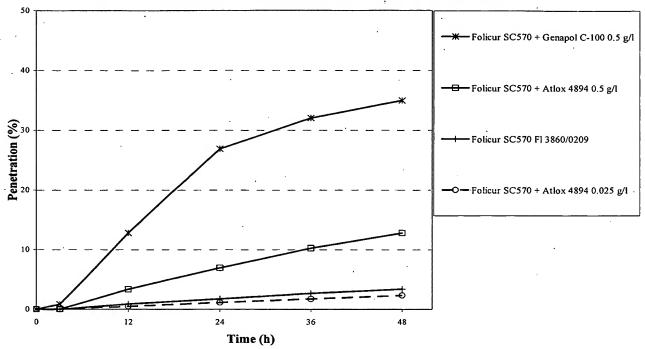
D: Folicur SC570 + 0.5 g/l Genapol C-100

## **Results**

Formulation	Penetration of Tebuconazole after				
	3 h	12 h	24 h	36 h	48 h
Α	<0.02	0.9	1.7	2.7	3.4
В	<0.02	0.5	1.1	1.8	2.3
С	<0.02	3.35	6.9	10.3	12.8
D	0.84	12.8	26.9	32.1	35.0

#### Impact of Atlox 4894 and Genapol C-100 on the cuticular penetration of **Tebuconazole from Folicur SC570**





The undersigned declarant declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed at Monheim, Germany,

2006-04-01 Date

Prof. Dr. Peter Baur